Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) A method of routing a message, conveyed in stream through a point-to-point connection to a load-balancing element, to one of a plurality of available processing systems each connected to the load-balancing element by separate point-to-point connections, comprising at the load-balancing element:

extracting the message from the stream;

detecting in the extracted message the presence of an identifier identifying one of the available processing systems;

and where the presence of the identifier is detected, forwarding the message to the processing system identified thereby via the appropriate connection;

otherwise determining a destination processing system for processing the message;

inserting into the message an identifier identifying the determined destination processing system; and

forwarding the message to the processing system via the appropriate connection.

2. (Original) A method according to claim 1, wherein each message further includes a message identifier for identifying related messages, the method further comprising maintaining a database of message identifiers for which no destination identifiers was detected along with information indicating to which of the available processing systems each message was forwarded to.

- 3. (Original) A method according to claim 2, further comprising, where a message is received without a destination identifier, searching the database for a related message identifier and, where found, forwarding the message to the processing system identified therein.
- 4. (Original) A method according to any previous claim, further comprising removing entries in the database after a predetermined amount of time.
- 5. (Original) A method according to any previous claim, wherein the point-to-point connection is a transport control protocol (TCP) connection, and wherein the message is a session initiation protocol (SIP) message.
- 6. (Original) A method according to any previous claim, wherein the step of inserting further comprises inserting the destination identifier into an extension header of a SIP message.
- 7. (Original) A load-balancing element for routing a message conveyed in a stream through a point-to-point connection to one of a plurality of available processing systems each connected to the load-balancing element by separate point-to-point connections, comprising at the load-balancing element:
 - a message processor for extracting the message from the stream;
- a message analyzer for detecting in the received message the presence of an identifier identifying one of the available processing systems; and
- a message forwarder for forwarding the message to the processing system identified thereby via the appropriate connection.

8. (Original) A load-balancing element according to claim 7, further comprising, for when the presence of a destination identifier is not detected,

a load analyzer for determining a destination processing system for processing the message; and

a message processor for inserting into the message a destination identifier identifying the determined destination processing system.

- 9.(Currently Amended) A load-balancing element according to claim 7 [[or 8]], wherein each message further includes a message identifier for identifying related messages, and further comprising a database for storing details of message identifiers for which no destination identifier was detected along with information indicating to which of the available processing systems each message was forwarded to.
- 10. (Currently Amended) A load-balancing element according to claim 7, [[8 or 9,]] further comprising, where a message is received without a destination identifier, means for searching the database for a related message identifier and for identifying to which processing system the message should be forwarded.
- 11. (Currently Amended) A load-balancing element according to any-of-claims 7 to 10-claim 7, adapted for use where each point-to-point connection is a transport control protocol (TCP) connection, and wherein the message is a session initiation protocol (SIP) message.
- 12. (Currently Amended) A load-balancing element according to any of claims 7 to 11 claim 7, wherein the message processor is adapted for inserting the destination identifier into an extension header of a SIP message.

- 13. (Currently Amended) A session initiation protocol (SIP) network comprising elements according to any of claims 7 to 12.claim 7.
- 14. (Currently Amended) A session initiation protocol (SIP) network operating in accordance with the method of any of claims 1 to 6 claim 1.